

Recombinant Mouse α -Synuclein/SNCA Protein (His Tag)

Catalog Number: PDEM100212

Note: Centrifuge before opening to ensure complete recovery of vial contents.

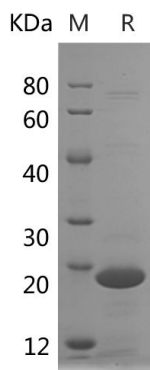
Description

Species	Mouse
Source	E.coli-derived Mouse α -Synuclein protein Met1-Ala140, with an N-terminal His
Mol_Mass	15.9 kDa
Accession	O55042
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Alpha-synuclein (Snca) belongs to a family of proteins including a-, b-, and g-synucleins. Alpha-synuclein has been found to be implicated in the pathophysiology of many neurodegenerative diseases, including Parkinson's disease (PD) and Alzheimer's disease. Many neurodegenerative diseases has shown that alpha-synuclein accumulates in dystrophic neurites and in Lewy bodies. The function of alpha-synuclein is closely correlated with its three-dimensional structure, especially for proteins important in the pathogenesis of neurodegenerative diseases. Alpha-synuclein is a dynamic molecule whose secondary structure depends on the environment. For example, it has an unfolded random coil structure in aqueous solution, forms α -helical structure upon binding to acidic phospholipid vesicles, and forms insoluble fibrils with a high β -sheet content that resemble the filaments found in Lewy bodies. Also, alpha-synuclein was known to associate with 14-3-3 proteins including protein kinase C, BAD, and extracellular regulated kinase, and overexpression of alpha-synuclein could contribute to cell death in neurodegenerative diseases.

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